Federal Communications Commission

WASHINGTON, D.C. 20554

JUL 29 1993.

In the Matter of

Preparation for International Telecommunication Union World Radiocommunication Conferences ET Docket No. 93-198

To: The Commission

REPLY COMMENTS OF TRW INC.

TRW Inc. ("TRW"), by its attorneys and pursuant to Sections 1.415 and 1.430 of the Commission's Rules, hereby replies to certain of the comments that were submitted in response to the Commission's Notice of Inquiry in the above-captioned proceeding, Preparation for International Telecommunication Union World Radiocommunication Conferences, FCC 93-328 (released June 28, 1993) ("NOI").

In its Comments in response to the <u>NOI</u>, TRW called for the Commission to recommend several matters for discussion at the 1993 World Radiocommunication Conference ("WRC-93"), and for inclusion on the agenda of WRC-95. Specifically, TRW proposed:

(1) allocation of additional spectrum for use by non-

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implementation of an interpretation of RR 2613 that will provide nongeostationary MSS systems with feeder links in bands shared with geostationary fixed-satellite service ("FSS") systems with a necessary measure of certainty that they will be able to continue to operate their systems.

Many of the parties filed comments containing proposed recommendations that echoed those called for in TRW's Comments. For example, Loral Qualcomm Satellite Services, Inc. ("LQSS") called for revisions to RR 731E and for a narrow interpretation of RR 2613 (see LQSS Comments at 13-16, 17-18), and the International Small Satellite Organization ("ISSO") called for allocation of additional MSS spectrum. See ISSO Comments at 2-3. Commenters also raised several other matters that TRW will touch upon briefly here.

A. The Commission Should Recommend Relaxation Of PFD Thresholds And Study Of Need For ISM Emission Limitations In The 2483.5-2500 MRs Band.

Two commenters, Constellation Communications, Inc.

("Constellation") and LQSS, called upon the Commission to
advocate a relaxation in the power flux density ("PFD")

thresholds adopted at WARC-92 for MSS operations in the 2483.52500 MHz band. See Constellation Comments at 2; LQSS Comments at
10-13. Constellation also questioned whether an exploration of
possible restrictions on Industrial, Scientific, and Medical

("ISM") equipment emissions in the MSS band segment at 2483.52500 MHz should be initiated.

TRW agrees with LQSS and Constellation that modifications to the PFD levels adopted for MSS operations in the 2483.5-2500 MHz band are advisable. The Commission's MSS Above 1 GHz Negotiated Rulemaking Committee, CC Docket No. 92-166, studied this issue, and suggested that the systems proposing to use the 2483.5-2500 MHz band should be able to increase their PFD to levels beyond those specified in RR 2566 without causing unacceptable interference to services with whom they are to share the band. The threshold level below which coordination is not required should be relaxed accordingly.

As for Constellation's suggestion about the need for possible restrictions on ISM emissions in the 2483.5-2500 MHz band, TRW notes that in an addendum to the Report of Drafting Group 2C to the Report of the MSS Above 1 GHz Negotiated Rule Making Committee -- an addendum endorsed by all of the applicants who propose to use the band for MSS transmissions -- a suggestion was made for "[f]urther studies on levels of [ISM] emissions under various conditions . . . in order to determine if additional measures of protection for the MSS systems are required." Addendum to Report of DG2C at 4. While it may not be possible for studies to be undertaken and concluded in time for results to be addressed at WRC-95, the Commission should recommend the initiation of necessary studies in order that the results (and any necessary regulatory modifications on ISM emissions) may be considered at WRC-97.

B. Efforts To Protect Or Allocate Spectrum For NonGeostationary MSS Feeder Link Operations Should Be Encouraged.

Several parties called for additional measures to protect nongeostationary MSS system feeder link operations in frequency bands shared with fixed-satellite service systems, or



operations are protected to an extent that does not jeopardize the viability of the service to be provided via the primary MSS communications links. Matters pertaining to spectrum for feeder links for all nongeostationary MSS systems and associated regulatory issues should be included on the agenda of WRC-95.

C. Other Matters

Although it had indicated that matters involving
Resolutions 46 and 70 should be included on the agenda for WRC95, TRW, upon further reflection, agrees with Motorola, Inc.'s
suggestion that these matters be deferred at least until WRC-97.

See Comments of Motorola, Inc. at 12-13. Both resolutions
envision the completion of comprehensive studies that will not be
available for consideration by the time WRC-95 is convened, and
the operational studies called for in Resolution 70 may not be
available even by WRC-97.

It should be a paramount objective of the Commission, going into WRC-93, WRC-95, WRC-97, and beyond, to ensure that any actions taken further the flexibility of MSS system operators to implement systems offering innovative services. If that requires the making of generic MSS allocations (as several parties suggest), or freeing up embargoed MSS spectrum early in order that it can be used for planning purposes (a proposal advanced by several others), so be it. The MSS is about to explode onto the scene within the next few years, and spectrum requirements will

grow exponentially over the next two or more decades -- just as they have for the FSS since the 1960s.

CONCLUSION

The comments filed in response to the NOI reflect a widespread call for the allocation of additional spectrum to the MSS, and the Commission should heed this call to the greatest extent possible. Other minor modifications to MSS actions taken at WARC-92 -- those suggested in TRW's Comments and endorsed here -- should also be undertaken. As an applicant that stands prepared to make at least one of the United States Government's WARC-92 MSS initiatives a global success, TRW encourages the Commission and the U.S. Government to continue to seek to expand and improve upon the MSS allocation actions taken at WARC-92.

Respectfully submitted,

TRW Inc.

By:

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July 29, 1993

CERTIFICATE OF SERVICE

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